

## Patent Abstracts of Japan

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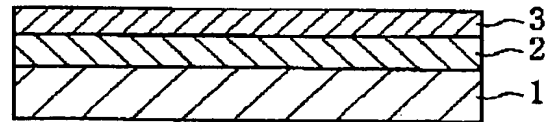
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TITLE : OUTER LEAD PART OF LEAD FRAME  
MATERIAL AND SEMICONDUCTOR  
DEVICE USING THE OUTER LEAD  
PART



**ABSTRACT :** PROBLEM TO BE SOLVED: To provide an outer lead part, which does adversely effect the environment, is superior in solderability and in welding strength at welding and is small in an ununiform section which is formed on the outer lead part at the time of a reflow treatment, of a lead frame material.

**SOLUTION:** This outer lead part A is one formed by laminating a first t1 thick plated layer 2 consisting of an Sn single member and a second t2 thick plated layer 1 consisting of an Si alloy containing at least one kind of a metal chosen from a group consisting of Ag, Bi, Cu, In and Zn in the order of these layers 2 and 1 on the surface of a conductive base body 3 and the t1 and the t2 are values to satisfy the conditions of  $6\ \mu\text{m} \leq t1 \leq 10\ \mu\text{m}$ ,  $1\ \mu\text{m} \leq t2 \leq 3\ \mu\text{m}$  and  $0.1 \leq t2/t1 \leq 0.5$ .

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